

What is claimed is

1. A container which can be sealed around at least 4 kg of bananas and which,
when sealed around the bananas, has an O₂ permeability at 13 °C, per kg of bananas
in the container (OP13/kg), of at least 700 ml/atm.24 hrs, an R ratio at 13 °C of at least
3, and an ethylene permeability at 13 °C, per kg of bananas in the container
(EtOP13/kg) which is at least 3 times the OP13/kg of the container.
- 10 2. A container according to Claim 1 which can be sealed around 16-22 kg of
bananas, and which, when so sealed, has an OP13/kg of at least 1500 ml/.atm.24 hrs.
- 20 3. A container according to Claim 1 which includes at least one permeable control
member which (i) provides a pathway for O₂, CO₂ and ethylene to enter or leave the
packaging atmosphere and (ii) comprises a gas-permeable membrane comprising
(a) a microporous polymeric film, and
(b) a polymeric coating on the microporous film.
4. A container according to Claim 3 wherein the gas-permeable membrane
(i) has a P₁₀ ratio, over at least one 10°C range between -5 and 25 °C of at
least 1.5, and
has an oxygen permeability (OTR), at all temperatures between 13 and 25°C, of
at least 2,480,000 ml/m².atm.24 hrs (160,000 cc/100 inch².atm.24 hrs).
- 25 5. A container according to Claim 3 wherein the microporous polymeric film
comprises a network of interconnected pores having an average pore size of less than
0.24 micron, with at least 70% of the pores having a pore size of less than 0.24 micron,
and (ii).
- 30 6. A container according to Claim 5 wherein

- (1) the pores in the microporous film constitute 35 to 80% by volume of the microporous film; and
- (2) the microporous film comprises
- 5 (a) a polymeric matrix comprising (i) an essentially linear ultrahigh molecular weight polyethylene having an intrinsic viscosity of at least 18 deciliters/g, or (ii) an essentially linear ultrahigh molecular weight polypropylene having an intrinsic viscosity of at least 6 deciliters/g, or (iii) a mixture of (i) and (ii); and
- 10 (c) 30 to 90% by weight, based on the weight of the film, of a finely divided particulate substantially insoluble filler which is distributed throughout the film.

20 7. A container according to Claim 3 wherein the polymeric coating comprises a crystalline polymeric moiety which has a T_p of -5 to 25 °C, and which is a side chain crystalline polymer comprising units derived from (i) at least one n-alkyl acrylate or methacrylate in which the n-alkyl group contains at least 12 carbon atoms and (ii) one or more comonomers selected from acrylic acid, methacrylic acid, and esters of acrylic or methacrylic acid in which the esterifying group contains less than 10 carbon atoms.

25 8. A container according to Claim 3 wherein the polymeric coating comprises a block copolymer which has a heat of fusion ΔH of at least 5 J/g, and which comprises (i) polysiloxane polymeric blocks, and (ii) crystalline polymeric blocks having a melting point, T_p , of -5 to 40 °C.

30 9. A container according to Claim 3 wherein at least 75% of the O₂ which enters the packaging atmosphere, after the container has been sealed around the bananas, passes through said at least one atmosphere control member.

10. A package which comprises
- 30 (a) a sealed container, and

- (b) within the sealed container, bananas and a packaging atmosphere around the bananas;

the sealed container having an O₂ permeability at 13 °C, per kg of bananas in the container (OP13/kg), of at least 1500, ml/atm.24 hrs, an R ratio at 13 °C of at least 3, and an ethylene permeability at 13 °C, per kg of bananas in the container (EtOP13/kg) which is at least 4 times the OP13/kg of the container.

11. A package according to Claim 10 wherein the bananas have not yet reached their climacteric, and the packaging atmosphere contains 14 to 19% of O₂, and less than 10% of CO₂, with the total quantity of O₂ and CO₂ being less than 17 %.

10

12. A package according to Claim 11 wherein the container includes at least one permeable control member which provides a pathway for O₂, CO₂ and ethylene to enter or leave the packaging atmosphere and which comprises a gas-permeable membrane comprising

- (a) a microporous polymeric film, and
(b) a polymeric coating on the microporous film.

H20

13. A package according to Claim 12 wherein the gas-permeable membrane
(i) has a P₁₀ ratio, over at least one 10°C range between -5 and 25 °C of at least 1.5, and
(ii) has an oxygen permeability (OTR), at all temperatures between 13 and 25°C, of at least 2,480,000 ml/m².atm.24 hrs (160,000 cc/100 inch².atm.24 hrs).

25

14. A package according to Claim 13 wherein the microporous polymeric film comprises a network of interconnected pores having an average pore size of less than 0.24 micron, with at least 70% of the pores having a pore size of less than 0.24 micron, and (ii).

30 15. A package according to Claim 14 wherein

- (1) the pores in the microporous film constitute 35 to 80% by volume of the microporous film; and
- (2) the microporous film comprises
- (a) a polymeric matrix comprising (i) an essentially linear ultrahigh molecular weight polyethylene having an intrinsic viscosity of at least 18 deciliters/g, or (ii) an essentially linear ultrahigh molecular weight polypropylene having an intrinsic viscosity of at least 6 deciliters/g, or (iii) a mixture of (i) and (ii); and
- (d) 30 to 90% by weight, based on the weight of the film, of a finely divided particulate substantially insoluble filler which is distributed throughout the film.

16. A package according to Claim 10 wherein the bananas have passed their climacteric, and the packaging atmosphere contains 1.5 to 6% of O₂, and less than 7%, of CO₂, with the total quantity of O₂ and CO₂ being less than 10 %.

17. A package according to Claim 16 wherein the container includes at least one permeable control member which provides a pathway for O₂, CO₂ and ethylene to enter or leave the packaging atmosphere and which comprises a gas-permeable membrane comprising

- (a) a microporous polymeric film, and
- (b) a polymeric coating on the microporous film.

18. A package according to Claim 17 wherein the gas-permeable membrane

(i) has a P₁₀ ratio, over at least one 10°C range between -5 and 25 °C of at least 1.5, and

(ii) has an oxygen permeability (OTR), at all temperatures between 13 and 25°C, of at least 2,480,000 ml/m².atm.24 hrs (160,000 cc/100 inch².atm.24 hrs).

19. A package according to Claim 18 wherein the microporous polymeric film

comprises a network of interconnected pores having an average pore size of less than 0.24 micron, with at least 70% of the pores having a pore size of less than 0.24 micron, and (ii).

- 5 20. A package according to Claim 19 wherein

(1) the pores in the microporous film constitute 35 to 80% by volume of
the microporous film; and

(2) the microporous film comprises

(a) a polymeric matrix comprising (i) an essentially linear ultrahigh
molecular weight polyethylene having an intrinsic viscosity of at
least 18 deciliters/g, or (ii) an essentially linear ultrahigh molecular
weight polypropylene having an intrinsic viscosity of at least 6
deciliters/g, or (iii) a mixture of (i) and (ii); and

(e) 30 to 90% by weight, based on the weight of the film, of a finely
divided particulate substantially insoluble filler which is distributed
throughout the film.

9358150-051504